

Serial No. 10/659,707  
Amendment dated **February 6, 2006**  
Reply to Office Action of **October 6, 2006**

Docket No. YHK-0116

**Amendments to the Specification:**

**Please replace the paragraphs beginning on page 7, line 6 through page 12, line 17 with the following amended paragraphs:**

In order to achieve these and other objects of the invention, a driving apparatus for a plasma display panel according to one aspect of the present invention includes a scan driver for applying a first sustaining pulse to a scan electrode during a sustain period; a sustain driver for applying a second sustaining pulse alternating with ~~said~~ the first sustaining pulse to a common sustain electrode during ~~said~~ the sustain period; a sustain voltage source for supplying a driving voltage to the scan driver and the sustain driver such that the first and second sustaining pulses can be applied; and control means for controlling a voltage value of ~~said~~ the driving voltage in correspondence with a driving temperature at which the panel is driven.

In the driving apparatus, ~~said~~ the sustain voltage source includes at least two driving voltage sources for supplying ~~said~~ the driving voltage; and a plurality of switching devices provided among the driving voltage source, the scan driver and the sustain driver.

Herein, ~~said~~ the control means includes a temperature sensor for generating a bit control signal corresponding to ~~said~~ the driving temperature at which the panel is driven; and a switch

controller for turning on any one of ~~said~~ the switching devices in response to ~~said~~ the bit control signal.

~~Said~~ The temperature sensor divides a high temperature into a plurality of temperature levels, and generates ~~said~~ the bit control signal differentiated for each temperature level.

~~Said~~ The switch controller controls ~~said~~ the switching devices such that ~~said~~ the first and second sustaining pulses having a lower voltage value as a temperature of the panel is more raised can be applied in response to ~~said~~ the bit control signal.

A driving apparatus for a plasma display panel according to another aspect of the present invention includes a scan driver for applying a scanning pulse and a first sustaining pulse to a scan electrode; a sustain driver for applying a second sustaining pulse alternating with ~~said~~ the first sustaining pulse to a common sustain electrode; a temperature sensor for sensing a peripheral temperature at which the panel is driven; and a sustain voltage source for supplying a driving voltage to the scan driver and the sustain driver such that the first and second sustaining pulses can be applied; and a timing controller for controlling the scan driver and the sustain driver in correspondence with ~~said~~ the peripheral temperature sensed by the temperature sensor.

Serial No. **10/659,707**  
Amendment dated **February 6, 2006**  
Reply to Office Action of **October 6, 2006**

Docket No. **YHK-0116**

In the driving apparatus, ~~said~~ the temperature sensor includes a first temperature sensor for sensing a high driving temperature; and a second temperature sensor for sensing a low driving temperature.

Herein, ~~said~~ the high temperature is 40°C to 90°C while ~~said~~ the low temperature is 20°C to - 20°C.

~~Said~~ The timing controller controls the scan driver and the sustain driver such that first and second sustaining pulses each having a first period can be applied when the panel is driven at ~~said~~ the high temperature, whereas it controls the scan driver and the sustain driver such that first and second sustaining pulses each having a second period different from ~~said~~ the first period can be applied at the other case.

Herein, ~~said~~ the first period is wider than ~~said~~ the second period.

~~Said~~ The first temperature sensor divides a high temperature into a plurality of temperature levels, and generates ~~said~~ the bit control signal differentiated for each temperature level.

Serial No. 10/659,707  
Amendment dated February 6, 2006  
Reply to Office Action of October 6, 2006

Docket No. YHK-0116

~~Said~~ The timing controller controls the scan driver and the sustain driver such that ~~said~~ the first and second sustaining pulses each having a wider period as ~~said~~ the temperature level is more raised can be applied.

Herein, periods of ~~said~~ the first and second sustaining pulses are set widely as a high interval and a low interval of ~~said~~ the first and second sustaining pulses are widened equally.

Alternatively, periods of ~~said~~ the first and second sustaining pulses are set widely as low intervals of ~~said~~ the first and second sustaining pulse are kept constantly while high intervals of ~~said~~ the first and second sustaining pulses are widened.

Otherwise, periods of ~~said~~ the first and second sustaining pulses are set widely as high intervals of ~~said~~ the first and second sustaining pulse are kept constantly while low intervals of ~~said~~ the first and second sustaining pulses are widened.

~~Said~~ The timing controller controls the scan driver such that ~~said~~ the scanning pulse having a first width can be applied when the panel is driven at ~~said~~ the low temperature while ~~said~~ the scanning pulse having a second width different from ~~said~~ the first width can be applied at the other case.

Serial No. 10/659,707  
Amendment dated February 6, 2006  
Reply to Office Action of October 6, 2006

Docket No. YHK-0116

Herein, ~~said~~ the first width is wider than ~~said~~ the second width.

~~Said~~ The second temperature sensor divides ~~said~~ the low temperature into a plurality of temperature levels, and generates ~~said~~ the bit control signal differentiated for each temperature level.

~~Said~~ The timing controller controls the scan driver such that ~~said~~ the scanning pulse having a larger width as ~~said~~ the temperature level is more lowered can be applied.

Herein, a width of ~~said~~ the scanning pulse is set to 1.1 $\mu$ s to 5 $\mu$ s.

The driving apparatus further includes a data driver for applying a data pulse corresponding to the width of ~~said~~ the scanning pulse under control of the timing controller.

A method of driving a plasma display panel according to still another aspect of the present invention includes the steps of applying a sustaining pulse having a first period when the panel is driven at the normal temperature; and applying a sustaining pulse having a second period

Serial No. **10/659,707**

Docket No. **YHK-0116**

Amendment dated **February 6, 2006**

Reply to Office Action of **October 6, 2006**

different from ~~said~~ the first period when the panel is driven a temperature higher than the normal temperature.

In the method, ~~said~~ the second period is wider than ~~said~~ the first period.

The method further includes the steps of dividing ~~said~~ the high temperature into a plurality of temperature levels; and setting ~~said~~ the second period in correspondence with ~~said~~ the temperature level.

Herein, ~~said~~ the second period is more widened as ~~said~~ the temperature level is more raised.

The method further includes the step of setting a voltage value of a sustaining pulse applied when the panel is driven at the normal temperature to be different from that of a sustaining pulse applied when the panel is driven at a temperature higher than the normal temperature.

Herein, the voltage value of ~~said~~ the sustaining voltage applied when the panel is driven at the high temperature is set to be lower than that of ~~said~~ the sustaining pulse applied when the panel is driven at the normal temperature.

Serial No. 10/659,707

Docket No. YHK-0116

Amendment dated February 6, 2006

Reply to Office Action of October 6, 2006

The method further includes the steps of dividing ~~said~~ the high temperature into a plurality of temperature levels; and setting the voltage value of ~~said~~ the sustaining pulse in correspondence with ~~said~~ the temperature level.

Herein, the voltage value of ~~said~~ the sustaining pulse is more lowered as ~~said~~ the temperature level is more raised.

A method of driving a plasma display panel according to still another aspect of the present invention includes the steps of applying a scanning pulse having a first width when the panel is driven at the normal temperature; and applying a scanning pulse having a second width different from ~~said~~ the first width when the panel is driven a temperature lower than the normal temperature.

In the method, ~~said~~ the second width is larger than ~~said~~ the first width.

The method further includes the steps of dividing ~~said~~ the low temperature into a plurality of temperature levels; and setting the second width of ~~said~~ the scanning pulse in correspondence with ~~said~~ the temperature level.

Serial No. **10/659,707**

Docket No. **YHK-0116**

Amendment dated **February 6, 2006**

Reply to Office Action of **October 6, 2006**

Herein, ~~said~~ the second width is more enlarged as ~~said~~ the temperature level is more lowered.